

IN THE DRAWINGS

Applicants propose to label the blocks in Figs. 1-3 and 5-7 of the drawings in accordance with the accompanying ANNOTATED SHEETS SHOWING CHANGES.

Enclosed herewith are REPLACEMENT SHEETS in which the above changes have been incorporated.

#### REMARKS

Enclosed herewith is a Substitute Specification in which the specification as filed has been amended in various places to correct typographical and grammatical errors, and to add section headings. In addition the specification as filed has been amended to cite U.S. patents corresponding to the cited International patent applications.

The Examiner had noted that the specification as filed made reference to a trademark "Hitachi". Applicants would like to point out that the reference was instead to the company Hitachi, Ltd., and the Substitute Specification has been amended accordingly.

Furthermore, with respect to the descriptions of Figs. 3-7, the specification has been amended to make specific reference to the unlabeled blocks in the original figures.

In support of the above, enclosed herewith is a copy of the specification as filed marked up with the above changes.

The undersigned attorney asserts that no new matter has been incorporated into the Substitute Specification.

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, the claims have been amended for clarity.

Applicants believe that the above changes answer the Examiner's objection to claims 1 and 16, and the Examiner's 35 U.S.C. 112, paragraph 2, rejection of claims 5 and 14, and respectfully request withdrawal thereof.

The Examiner has rejected claim 15 under 35 U.S.C. 101 in that the claimed invention is allegedly direct to non-statutory subject matter.

Throughout the specification, Applicants have described the various components that make up the apparatus as claimed in claim 15. In particular, "means for reading out the additional information stored in the storage unit" is described in the Substitute Specification on page 13, paragraphs [0035] and [0036], where the security module 7 "is capable of reading out the information present in the storage unit 4"; "means for checking the integrity of the additional information", is described in the Substitute Specification on pages 15-18, paragraphs [0042] to [0044]; and "means for reading out the resurrection key stored in the one-time programmable memory and restoring the additional information by using the resurrection key if the integrity of the additional information is insufficient" is described in the specification on page 18, paragraph [0045].

It appears that the Examiner is basing the rejection on 2 lines appearing at the end of the specification, to wit, "the invention can be implemented by means of both hardware and software". Applicants point out that it is common practice to include several embodiments of the invention. In fact, Applicants are required to disclose the "best mode" of practicing the invention. If in fact a software implementation of the invention is the "best mode", then it would be impermissible for Applicants not

to include such in the specification, even if such an implementation would not be coverable by the claims.

Applicants submit that the only requirement is that an embodiment of the invention be described in the specification which is coverable by the claims.

Applicants therefore believe that the invention as claimed in claim 15 is indeed directed to statutory subject matter.

The Examiner has rejected claims 1, 10 and 16 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0024905 to Kahlman et al. (erroneously referred to by the Examiner as Hart et al.) in view of Applicant Admitted Prior Art (AAPA), and further in view of the article "A 25ns 16K CMOS PROM using a 4-Transistor Cell", by Pathak et al. The Examiner has further rejected claims 2-7 under 35 U.S.C. 103(a) as being unpatentable over Kahlman et al. in view of AAPA and Pathak et al., and further in view of U.S. Patent 6,266,481 to Lee et al. In addition, the Examiner has rejected claim 8 under 35 U.S.C. 103(a) as being unpatentable over Kahlman et al. in view of AAPA and Pathak et al., and further in view of U.S. Patent 3,028,659 to Chow et al. Furthermore, the Examiner has rejected claim 9 under 35 U.S.C. 103(a) as being unpatentable over Kahlman et al. in view of AAPA and Pathak et al., and further in view of U.S. Patent 6,369,421 to Xiang et al. Finally, the Examiner has rejected claims 11-15 under 35 U.S.C. 103(a) as being unpatentable over Kahlman et al. in view of AAPA and Pathak et al. and Lee et al., and further

in view of U.S. Patent Application Publication No. 2002/0162057 to Talagala.

The Kahlman et al. application corresponds to International Patent Application No. WO 02/17316 cited on page 1 of the subject specification. In fact, what the Examiner describes as AAPA is in fact a description of what is disclosed in Kahlman et al., i.e., a record carrier having an information area for storing information, and an integrated circuit comprising a storage unit for storing additional information, in which the additional information comprises a key for scrambling and/or descrambling the information to be stored and/or already stored on the record carrier in the information area.

The Pathak et al. article discloses the existence of an electronic memory having an extended data retention period.

The Examiner states:

*"Hart teaches a record carrier [figure 1] comprising an information area for storing information [abstract lines 1-2], and an integrated circuit [abstract line 3 and figure 1 element 4] comprising a storage unit for storing additional information (AK) [key: paragraph 0010], the integrated circuit further comprising a memory [paragraph 0006 and claim 6] comprising a resurrection key ( $R_K$ ) [paragraph 0023].*

*"However, Hart does not explicitly teach that the integrated circuit comprising a storage unit for storing additional information (DRM). AAPA teaches that the integrated circuit*

*comprising a storage unit for storing additional information (DRM)*  
[specification page 1 lines 11-17]."

Applicants believe that the Examiner is mis-reading Hart (actually Kahlman et al.). In particular, in Kahlman et al., the "memory" cited in paragraph [0006] is the same as the storage unit of the subject invention, i.e., it stores "additional information" for enabling access to the information stored on the record carrier in the information area. This information may include an Asset Key AK used for scrambling/descrambling the information stored on the record carrier in the information area, or Rights (DRM) used to control access to the information stored on the record carrier in the information area. However, there is no disclosure in Hart/Kahlman et al. of a memory, separate and distinct from the storage unit, "comprising a resurrection key for use in restoring the additional information". Applicants would like to note that while Hart/Kahlman et al. in paragraph [0010] describes a key for scrambling/descrambling the information stored in the first area of the record carrier, there is no description or mention of a "storage unit" or a "memory" in paragraph [0010].

Further, while the Examiner suggests that the resurrection key RK is disclosed in Hart/Kahlman et al. in paragraph [0023], it should be noted that the "key" described in paragraph [0023] is used to scramble/descramble the information in the first area of the record carrier, i.e., the same key that is being described in general in the Summary of paragraph [0010]. However, there is no disclosure or suggestion of a resurrection key RK "for use in

restoring the additional information" stored in the storage unit, as opposed to the information stored in the information area of the record carrier.

While Pathak et al. arguably teaches a memory having a substantially larger data retention time than the storage unit (or memory) of Hart/Kahlman et al., Applicants submit that there is no disclosure or suggestion in Hart/Kahlman et al. and AAPA that the memory of Pathak et al. should be combined with the storage unit (or memory) already in Hart/Kahlman et al. and AAPA, and that this added memory should comprise a resurrection key for use in restoring the additional information stored in the storage unit (or memory) of Hart/Kahlman et al. and AAPA which had become corrupted.

The Lee et al. patent discloses a conditional access system for local storage device, in which a memory has stored the expiration date data associated with the selected program. However, Applicants submit that Lee et al. does not supply that which is missing from Hart/Kahlman et al., AAPA and Pathak et al., i.e., a record carrier an information area for storing information, and an integrated circuit having a storage area for storing additional information and a memory comprising a resurrection key for use in restoring the additional information.

The Chow et al. patent discloses a storage matrix which arguably may be referred to as fuse-logic. However, Applicants submit that Chow et al. does not supply that which is missing from Hart/Kahlman et al., AAPA and Pathak et al., i.e., a record carrier an information area for storing information, and an integrated

circuit having a storage area for storing additional information and a memory comprising a resurrection key for use in restoring the additional information.

The Xiang et al. patent discloses an EEPROM having stacked dielectric to increase programming speed, which arguably has a data retention time of 10 years. However, Applicants submit that Xiang et al. does not supply that which is missing from Hart/Kahlman et al., AAPA and Pathak et al., i.e., a record carrier an information area for storing information, and an integrated circuit having a storage area for storing additional information and a memory comprising a resurrection key for use in restoring the additional information.

The Talagala patent publication discloses a data integrity monitoring storage system in which data is checked and if errors are discovered, the data is repaired or restored. However, Applicants submit that Talagala does not supply that which is missing from Hart/Kahlman et al., AAPA and Pathak et al. and Lee et al., i.e., a record carrier an information area for storing information, and an integrated circuit having a storage area for storing additional information and a memory comprising a resurrection key for use in restoring the additional information.

In view of the above, Applicants believe that the subject invention, as claimed, is not rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.



Applicants believe that this application, containing claims 1-16, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

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